ABSTRACT

In a remote unit of a wireless communication system, the speed of acquisition, or reacquisition, of a pilot signal by a search engine is increased. PN space is divided into segments and a coarse search of each segment is performed using a set of "fast" search parameters. A set of peak signal strengths, along with their corresponding PN offsets, is saved for each segment of PN space. Following the search of all segments of PN space, the peak signal strengths which were saved during the coarse acquisition are evaluated. Coarse acquisition search results are used by the remote unit to determine fine search window parameters for subsequent searches performed by the remote unit search engine. The fine search parameters concentrate searching efforts on portions of PN space most likely to contain a viable base station pilot signal.